ABSTRACT

Synthesis of 5-methoxy-2-(4-methylbenzoyloxy)benzoate Acid And It Anlgesic Activity Test In Mice (*Mus musculus*)

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The perpuse of the research is to synthesis novel of derivate salycilic acid 5-metoxy-2-(4-methylbenzoyloxy)benzoate acid and it analgesic activity test in mice. 5-metoxy-2-(4-methylbenzoyloxy)benzoate acid synthesized with modification Schotten Baumann method by reacting 5-methoxy salycilic acid and 4-methylbenzoil chloride. Pyridine as catalyst and THF as solvent. The result obtained 33.65% from synthesis. After that purity test with 2 method are thin layer chromathography and melting point test. The structure confirmed by UV spectrophotometry, infrared spectrophotometry and ^{1}H-NMR spectrometry method. It analgesic activity tested with writhing test method. And the result are ED_{50} of 5-methoxy-2-(4-methylbenzoyloxy)benzoate acid is 22,78 mg/kg body weight and ED_{50} of acetosal is 80,26 mg/kg body weight. It concluded that 5-methoxy-2-(4-methylbenzoyloxy)benzoate acid have higher analgesic activity than acetosal.

Keyword: synthesis, 5-metoxy-2-(4-methylbenzoyloxy)benzoate acid, analgesic activity, ED_{50}